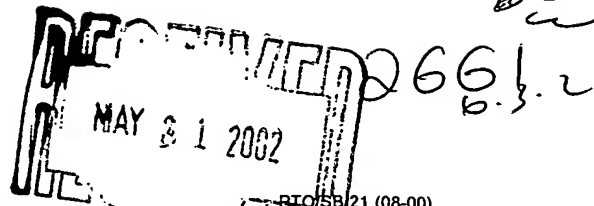




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Approved for use through 10/31/2002 IMB 0651-0031
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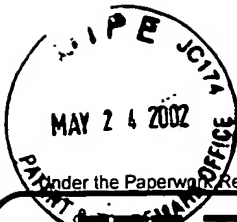
TRANSMITTAL FORM <i>(to be used for all correspondence after initial filing)</i>	Application Number	10/080,022	
	Filing Date	2/21/2002	
	First Named Inventor	De et al.	
	Group Art Unit	Not Yet Known	
	Examiner Name	Not Yet Known	
Total Number of Pages in This Submission	7	Attorney Docket Number	I-2-0173.6US

ENCLOSURES (check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosure(s) (please identify below): RECEIVED MAY 30 2002 Technology Center 2600
Remarks		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT		
Firm or Individual name	JEFFREY M. GLABICKI Volpe and Koenig, P.C.	Reg. No. 42,584
Signature		
Date	May 20, 2002	

CERTIFICATE OF MAILING			
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on this date: May 20, 2002			
Typed or printed name	JEFFREY M. GLABICKI		
Signature		Date	May 20, 2002

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Volpe and Koenig Revision of PTO/SB/17 (10-01)
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FEE TRANSMITTAL for FY 2002

Patent fees are subject to annual revision.

Complete if Known

Application Number	10/080,022
Filing Date	2/21/2002
First Named Inventor	De et al.
Examiner Name	Not Yet Known
Group Art Unit	Not Yet Known
Attorney Docket No.	I-2-0173.6US

TOTAL AMOUNT OF PAYMENT (\$)
0

METHOD OF PAYMENT

1. ☐ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit Account Number: 22-0493

Deposit Account Name: VOLPE AND KOENIG, P.C.

☒ Charge any Deficiencies or Credit any Overpayment in the Total Fees Associated With This Communication

☐ Applicant claims small entity status. See 37 CFR 1.27

2. ☐ Payment Enclosed:

☐ Check ☐ Credit card ☐ Money Order ☐ Other

FEE CALCULATION (continued)

3. ADDITIONAL FEES					
Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid		
105 130 205 65		Surcharge - late filing fee or oath			
127 50 227 25		Surcharge - late provisional filing fee or cover sheet			
139 130 139 130		Non-English specification			
147 2,520 147 2,520		For filing a request for ex parte reexamination			
112 920* 112 920*		Requesting publication of SIR prior to Examiner action			
113 1,840* 113 1,840*		Requesting publication of SIR after Examiner action			
115 110 215 55		Extension for reply within first month			
116 400 216 200		Extension for reply within second month			
117 920 217 460		Extension for reply within third month			
118 1,440 218 720		Extension for reply within fourth month			
128 1,960 228 980		Extension for reply within fifth month			
119 320 219 160		Notice of Appeal			
120 320 220 160		Filing a brief in support of an appeal			
121 280 221 140		Request for oral hearing			
138 1,510 138 1,510		Petition to institute a public use proceeding			
140 110 240 55		Petition to revive - unavoidable			
141 1,280 241 640		Petition to revive - unintentional			
142 1,280 242 640		Utility issue fee (or reissue)			
143 460 243 230		Design issue fee			
144 620 244 310		Plant issue fee			
122 130 122 130		Petitions to the Commissioner			
123 50 123 50		Processing fee under 37 CFR 1.17(q)			
126 180 126 180		Submission of Information Disclosure Stmt			
581 40 581 40		Recording each patent assignment per property (times number of properties)			
146 740 246 370		Filing a submission after final rejection (37 CFR § 1.129(a))			
149 740 249 370		For each additional invention to be examined (37 CFR § 1.129(b))			
179 740 279 370		Request for Continued Examination (RCE)			
169 900 169 900		Request for expedited examination of a design application			
Other fee (specify)					
*Reduced by Basic Filing Fee Paid				SUBTOTAL (3)	0

FEE CALCULATION

1. BASIC FILING FEE					
Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
101	740	201	370	Utility filing fee	
106	330	206	165	Design filing fee	
107	510	207	255	Plant filing fee	
108	740	208	370	Reissue filing fee	
114	160	214	80	Provisional filing fee	
SUBTOTAL (1)				(\$)	0

2. EXTRA CLAIM FEES

Total Claims: - ** = X =

Independent Claims: - ** = X =

Multiple Dependent: =

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid	
103 18 203 9		Claims in excess of 20		
102 84 202 42		Independent claims in excess of 3		
104 280 204 140		Multiple dependent claim, if not paid		
109 84 209 42		** Reissue independent claims over original patent		
110 18 210 9		** Reissue claims in excess of 20 and over original patent		
SUBTOTAL (2)				0

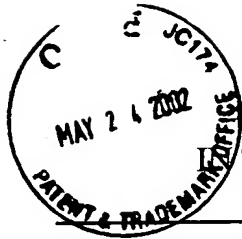
**or number previously paid, if greater; For Reissues, see above

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SUBMITTED BY		Complete (if applicable)	
Name (Print/Type)	Jeffrey M. Glabicki	Registration No. (Attorney/Agent)	42,584
Signature		Telephone	215-568-6400
		Date	May 20, 2002

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PATENT

THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the **PATENT APPLICATION** of:

De et al.

Application No.: 10/080,022

Filed: 02/21/2002

For: SINGLE USER DETECTION USER
EQUIPMENT

Group: Not Yet Known

Examiner: Not Yet Known

Our File: I-2-0173.6US

Date: May 20, 2002

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MAY 30 2002

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INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
Washington, D.C. 20231

Sir:

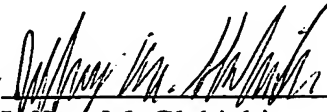
Further to applicant's Duty of Disclosure pursuant to 37 C.F.R. § 1.56, applicant wishes to bring to the Examiner's attention the material cited on the enclosed PTO-1449 form.

Applicant: De et al.
Application No.: 10/080,022

It is respectfully requested that the Examiner consider these documents and return an initialed copy of the PTO-1449 form indicating his consideration of the cited materials.

Respectfully submitted,

De et al.

By 
Jeffrey M. Glabicki
Registration No. 42,584
(215) 568-6400

Volpe and Koenig, P.C.
Suite 400, One Penn Center
1617 John F. Kennedy Boulevard
Philadelphia, PA 19103

JMG/jrd
Enclosures



FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEINFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(Use several sheets if necessary)

ATTY. DOCKET NO.
I-2-0173.6USSERIAL NO.
10/080,022APPLICANT
De et al.FILING DATE
2/21/2002GROUP
Not Yet Known**RECEIVED****MAY 30 2002**

U.S. PATENT DOCUMENTS

Technology Center 2600

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
					YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

AA		Ramjee Prasad, Werner Mohr and Walter Konhauser editors, <i>Third Generation Mobile Communication Systems</i> , Artech House, Boston, 2000.
AB		Anja Klein, Ghassan Kawas Kaleh and Paul Walter Baier, "Zero Forcing and Minimum Mean-Square Error Equalization for Multiuser Detection in Code-Division Multiple-Access Channels", <i>IEEE Trans. on Vehicular Technology</i> , Vol.45, No. 2, pp. 276-287, May 1996.
AC		Naja Klein, "Data Detection Algorithms Specially Designed for the Downlink of CDMA Mobile Radio Systems", <i>IEEE 47th Vehicular Technology Conference</i> , pp. 203-207, May 1997.
AD		H.R. Karimi and N.W. Anderson, "A Novel and Efficient Solution to Block-Based Joint-Detection using Approximate Cholesky Factorization", <i>Personal, Indoor and Mobile Communications PIMRC' 98</i> , Conference Proceedings, Vol. 3, pp. 1340-1345, Sept. 1998, Boston, MA.
AE		ETSI STC SMG2 Layer 1 Expert Group, "Low Cost MMSE-BLE-SD Algorithm for UTRA TDD Mode Downline", Tdoc SMG2 UMTS L1, Helsinki, Finland, Sept. 1998.
AF		3G TS 25.102 V3.4.0, 2000-10, "UTRA (TDD) Radio Transmission and Reception", 3rd Generation Partnership Project, Technical Specification Group RAN WG4, Annex B., pp. 37.

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.